

Interactive Multimedia Presentation

The student will be proficient in using interactive multimedia tools to develop electronic presentations. Creative design, persuasive communications, and language arts skills are applied through research, evaluation, validation, written and oral communication. Typography, layout, and design guidelines are applied. Copyright laws and ethical practices are reinforced in creating and formatting various presentations that require imported data/graphics, digital, audio, and video clips. Team development will also be stressed as students work on multimedia project(s). Laboratory facilities and experiences simulate those found in business and industry.

Recommended Prerequisites: Keyboarding/Document Formatting

Suggested Prerequisites: Keyboarding/ Document Layout and Design

Grades: 11, 12

Recommended Credit: 1 Credit

Standard 1.0

The student will demonstrate a comprehension of the materials, technologies, media, components and their working relationship utilized within the industry.

Standard 2.0

The student will research and apply knowledge of ethical and legal issues within the industry.

Standard 3.0

The student will research and apply typography, layout, design, and composition concepts and guidelines for preparation of a multimedia project.

Standard 4.0

The student will organize information and communicate ideas by visualizing space configurations and movements.

Standard 5.0

The student will relate and apply artistic knowledge, skills, and techniques to the production of various projects.

Standard 6.0

The student will communicate ideas and information to a variety of audiences for a variety of purposes.

Standard: 7.0

The student will evaluate the purposes, functions, and features used in preparing digital communication.

Standard 8.0

The student will apply concepts and use technology tools and resources to create content, manage information, and communicate ideas relevant to a specific project.

Standard 9.0

The student will develop and demonstrate human relations, self-management, organizational and professional leadership skills.

Standard 10.0

The student will collaborate with peers, experts and others to develop a finished interactive multimedia project.

Standard 11.0

The students will evaluate career opportunities and career paths while demonstrating employability skills required within the industry.

Course Description

The student will be proficient in using interactive multimedia tools to develop digital communication presentations. Creative design, persuasive communications, and language arts skills are applied through research, evaluation, validation, written and oral communication. Typography, layout, and design guidelines are applied. Copyright laws and ethical practices are reinforced in creating and formatting various presentations that require imported data/graphics, digital, audio, and video clips. Team development will also be stressed as students work on multimedia project(s). Laboratory facilities and experiences simulate those found in business and industry. *(This course requires a computerized workstation for each student with presentation management software and tools provided.)*

Standard 1.0

The student will demonstrate a comprehension of the terminology materials, technologies, media, components and their working relationship utilized within the industry.



Learning Expectations

The student will

- 1.1 Define interactive multimedia presentation terminology. (Gateway English II 1.0, 2.0, 3.0, 4.0)
- 1.2 Examine portfolio components, usage, and evaluation. (Gateway English II 2.0, 3.0)
- 1.3 Describe the basic components of an interactive multimedia presentation and their working relationships. (Gateway English II 1.0, 4.0)
- 1.4 Analyze audio and video media. (Gateway English II 1.0, 3.0)
- 1.5 Describe examples of digital media such as:
 - a. graphics
 - b. digital photography
 - c. video
 - d. sound
 - e. music
 - f. animation
 - g. motion
- 1.6 Recognize the various types of formats that can be found in a project.
- 1.7 Describe basic principles of user-interface.
- 1.8 Define intellectual property and fair use.
- 1.9 Explain general concepts of user interaction.

Student Performance Indicators: Evidence Standard Is Met

The student:

-  Starts a portfolio that includes examples of each of the components and resources used in developing an interactive multimedia presentation.
-  Reports current trends and issues relating to intellectual property and fair use.

Sample Performance Task

The student will collect and identify the various types of digital media. Each example should provide the file size, file type and source of the media. Assessment will be done through the portfolio.

Integration/Linkages

All subject areas, SCANS, National Standards for Business Education, Policy Commission for Business and Economic Education, National Science Education Standards, National Math Standards, National Language Arts Skills Standards, National Educational Technology Standards (NETS), Data Processing Management Association (DPMA), and International Association of Administrative Professionals (IAAP), Gateway English II

Standard 2.0

The student will research and apply knowledge of ethical and legal issues within the industry



Learning Expectations

The student will:

- 2.1 Demonstrate work ethics that include integrity, honesty, loyalty, and perseverance that meet industry standards.
- 2.2 Research benefits and consequences resulting from the practice of business ethics. (Gateway English II 2.0, 3.0)
- 2.3 Comprehend copyright laws and their applications to text, visual art, design, music, and photography. (Gateway English II 2.0, 3.0)
- 2.4 Research legal responsibilities associated with the use of the Internet as required by federal and state government agencies. (Gateway English II 2.0, 3.0)
- 2.5 Evaluate source material for its authenticity, validity, and perspective.
- 2.6 Evaluate safety issues associated with the use of the Internet.

Student Performance Indicators: Evidence Standard is Met

The student:

-  Applies ethical conduct providing the proper credit to those whose ideas and content has been used in creating interactive multimedia projects.
-  Demonstrates ethical behaviors in what is written, spoken, or presented in designing and presenting a multimedia project.

- ✚ Applies knowledge of copyrights in seeking formal permission from copyright sources before using materials.
- ✚ Recognizes the legal implications of violating federal and state laws in multimedia\digital publishing.
- ✚ Demonstrates legal responsibilities using the Internet for interactive multimedia projects.
- ✚ Selects source material that is reliable and credible in development of the presentation.
- ✚ Demonstrates skills necessary for safety and environmental protection in digital design and photography
- ✚ Develops a virtual presentation on ethical, legal, and safety issues that could be posted on the web.

Sample Performance Task

Design and produce an interactive multimedia project on legal and ethical issues that includes issues and penalties for plagiarism; copied data without permission but with attribution, according to fair use guidelines; copied data with permission; and the process used to obtain permission. Obtain formal permission for use of text, art form, design, music, and photographs. Develop and present a total team interactive multimedia project utilizing various technology components.

Integration/Linkages

All subject areas, SCANS, National Standards for Business Education, Policy Commission for Business and Economic Education, National Science Education Standards, National Math Standards, National Language Arts Skills Standards, National Educational Technology Standards (NETS), Data Processing Management Association (DPMA), International Association of Administrative Professionals (IAAP), Gateway English II

Standard 3.0

The student will research and apply typography, layout, design, and composition concepts and guidelines for preparation of a multimedia project.








Learning Expectations

The student will:



- 3.1 Analyze composition processes. (Gateway English II 1.0, 2.0, 3.0, 4.0)
- 3.2 Analyze principles of typography. (Gateway English II 1.0, 2.0, 3.0)
- 3.3 Illustrate how to apply typographical commands to text.
- 3.4 Evaluate the effectiveness of typography in publications. (Gateway English II 1.0, 2.0, 4.0)
- 3.5 Compare and contrast the typography from at least two print sources (Gateway English II 1.0, 2.0, 3.0, 4.0)
 - a. composition techniques.
 - b. different typestyles.
 - c. different types of justification.
- 3.6 Analyze layout principles. (Gateway English II 3.0)
- 3.7 Analyze principles of design: (Gateway English II 3.0; Gateway Algebra I 5.0)
 - a. special affects techniques
 - b. thumbnail sketches
 - c. guides, rulers, scales, menus, pallets
 - d. text alignment, elements positioning, rules of page design for printed text
 - e. margins, gutters, tabs, letter spacing, tracking, leading and headings
 - f. columnar grid setup
 - g. style formulation
 - h. master page construction
 - i. spot color and process color to text and graphics
- 3.8 Illustrate gradations in shapes and blend colors. (Gateway Algebra I 5.0)
- 3.9 Illustrate methods of importing and exporting text and graphics. (Gateway English II 3.0)

Student Performance Indicators: Evidence Standard is Met

The student:

-  Prepares a layout using typography specifications.
-  Applies layout and design principles using original and/or imported graphics. (*Gateway Algebra 5.0*)
-  Applies spot color to graphics and text.
-  Applies typographical commands to text.
-  Rotates text and graphics. (*Gateway Algebra 5.0*)
-  Proofs, edits, resizes, crops/manipulates copy and graphics (*Gateway Algebra 2.0*)
-  Prints or publishes hard copy that meets publication and design standards.

Sample Performance Task

-  **Have students illustrate at least three font technologies. Using different backgrounds, contrast and compare the typography of each.**
-  Design and create various projects, i.e., commercial, ad campaign, public relations announcement, master slide for a legislative presentation....

Integration/Linkages

All subject areas, SCANS, National Standards for Business Education, Policy Commission for Business and Economic Education, National Science Education Standards, National Math Standards, National Language Arts Skills Standards, National Educational Technology Standards (NETS), Data Processing Management Association (DPMA), International Association of Administrative Professionals (IAAP), Gateway Algebra I, and Gateway English II

Standard 4.0

The student will organize information and communicate ideas by visualizing space.









Learning Expectations:

The student will:

- 4.1 Demonstrate design and layout techniques. (Gateway Algebra I 5.0)
- 4.2 Create simple illustrations (Gateway English II 1.0, 3.0; Gateway Algebra I 5.0)
- 4.3 Demonstrate development of layouts applying elements of line, shape, texture, and value to create form and space. (Gateway Algebra I 3.0, 5.0)
- 4.4 Organize information and communicate ideas by visualizing space configuration scale. (Gateway English II 1.0, 4.0; Gateway Algebra I 3.0, 5.0)
- 4.5 Demonstrate the ability to use computer software to identify, create, and manipulate surfaces, scale, rotation, zoom, shading and layout.
- 4.6 Identify element styles of animation, art, sketching and drawing. (Gateway Algebra I 5.0)
- 4.7 Demonstrate ability to operate camera, import digital media, and manipulate the media.

Student Performance Indicators: Evidence Standard is Met

The student:

-  Applies basic design techniques to illustrate print and digital applications for layout and scale. (*Gateway Algebra 1.0, 2.0, 3.0*)
-  Develop 3D shapes and textures.
-  Apply elements styles of animation, art, sketching and drawing in an interactive multimedia presentation.
-  Create, edit, copy and manipulate dimensional layout/spreads, geometric entities, and drawings using drawing tools industry standards. (*Gateway Algebra 1.0, 2.0, 5.0*)
-  Illustrate line, design and artistic details in layouts. (Gateway Algebra 3.0, 5.0)
-  Demonstrates how to use imaging technology to create a unique and product. (*Gateway Algebra 5.0*)
-  Applies proper photographic skills. (*Gateway Algebra 1.0, 2.0, 5.0*)
-  Creates a layout that successfully applies elements of line, shape, texture, and value to create form and space.

Sample Performance Tasks

Assign a teamwork activity to develop and demonstrate digital imaging preparation, reproduction, and finishing an interactive multimedia product that includes computer-generated sketches, screen captures, cropping and scaling photographs, and electronically developed line art in layouts.

Integration/Linkages

All subject areas, SCANS, National Standards for Business Education, Policy Commission for Business and Economic Education, National Science Education Standards, National Math Standards, National Language Arts Skills Standards, National Educational Technology Standards (NETS), Data Processing Management Association (DPMA), International Association of Administrative Professionals (IAAP), Gateway Algebra I, and Gateway English II

Standard 5.0The student will relate and apply artistic knowledge, skills, and techniques to the production of various projects.






Learning Expectations

The student will:



- 5.1 Compare and contrast a variety of different media resources. (Gateway English II 1.0, 2.0, 3.0, 4.0)
- 5.2 Review and evaluate appropriateness of presentations with reference to audience. (Gateway English II 4.0)
- 5.3 Evaluate professional look of templates of master slides. (Gateway English II 3.0; Gateway Algebra I 5.0)
- 5.4 Discuss continuity and form in presentation. (Gateway English II 1.0, 4.0)
- 5.5 Identify the various techniques utilized in software applications, such as photo editing, music sampling, graphic animation. (Gateway English II 3.0; Gateway Algebra I 3.0, 5.0)

Student Performance Indicators: Evidence Standard is Met

The student:

-  Differentiates and reports on styles, color, graphics, and formatting used in various newsprint media. (*Gateway Algebra I 3.0, 5.0*)
-  Creates or selects a master slide based on the media used and customer's project that is to be developed.
-  Designs style-sheets which emphasize continuity and form in presentation. (Gateway Algebra I 2.0, 5.0)
-  Employs image manipulation using digital tools. (Gateway Algebra I 1.0, 3.0, 5.0)
-  Digitally manipulates, enhances, and produces photographs or other art elements utilizing photo editing software.

Sample Performance Task

-  **Access the Internet and find related noncopyrighted clip art for a master slide.**
-  **Create a design and layout for a specific product which could be used in industry. Work in conjunction with team members to produce multiple slides. Maintain a portfolio.**

Integration/Linkages

All subject areas, SCANS, National Standards for Business Education, Policy Commission for Business and Economic Education, National Science Education Standards, National Math Standards, National Language Arts Skills Standards, National Educational Technology Standards (NETS), Data Processing Management Association (DPMA), International Association of Administrative Professionals (IAAP), Gateway Algebra I, and Gateway English II

Standard 6.0










Students communicate ideas and information using a multimedia presentation to a variety of audiences for a variety of purposes.

The student will:

- 6.1 Demonstrate the ability to communicate information to a specific audience for a specific purpose in print, art, and/or speech. **(Gateway English II 1.0, 3.0, 4.0)**
- 6.2 Explore persuasive communication skills using various media. (Gateway English II 3.0, 4.0)
- 6.3 Identify media techniques and processes used to achieve identified goal. (Gateway English II 1.0, 2.0, 3.0)
- 6.4 Compare and contrast the power of digital communication versus a traditional communication presentation. (Gateway English II 1.0, 2.0, 3.0, 4.0)
- 6.5 Analyze style layouts to determine how they reflect, influence, and communicate ideas. (Gateway English II 3.0; Gateway Algebra I 5.0)
- 6.6 Use persuasive forms of communication and write for a variety of audiences. (Gateway English II 1.0)

Student Performance Indicators: Evidence standard is met

The student:

-  Determines appropriate preparation for a multimedia oral presentation to a specified audience. (Gateway English II 3.02, 3.06)
-  Applies media techniques and processes with sufficient skill to achieve identified goal.
-  Identifies a topic to be used in developing an interactive multimedia presentation to be presented to a given audiences on a specific topic.
-  Creates a style layout to be used in presenting the given topic
-  Lays out a storyboard, incorporating script, visuals, format and sequence for presentation. (Gateway English II 1.08, 1.09)
-  Designs an interactive multimedia presentation using storyboard sequence multimedia software
-  Prints audience handouts and a speaker outline.
-  Presents an oral presentation directed to specific audience. (Gateway English II 4.03) Maintains a portfolio.
-  Prepares and delivers a persuasive interactive multimedia presentation. Maintains a portfolio.



Sample Performance Task



Students select a specific audience and related topic and research information to present a multimedia presentation with accompanying oral commentary to fit a specific audience. Presentation handouts and outline of commentary will be given to audience. Students will work in peer groups on storyboard layout, design presentation, practicing, editing the presentations, and making the final presentation. Students will evaluate presentations using a rubric to evaluate planning, revisions, and presentations. (*Gateway English II 3.01, 3.02, 3.03*)



Create a layout and design that successfully conveys a central thought based on information, ideas, composition that would appeal to the desired audience,. Research media and digital print to prepare a persuasive communication presentation or report which identifies the audiences, describes ideas and emotions portrayed by the author, and communicates messages through the use of text, graphics, animated clip art and music clip. (*Gateway English II 3.01, 3.02, 3.03*)

Integration/Linkages

All subject areas, SCANS, National Standards for Business Education, Policy Commission for Business and Economic Education, National Science Education Standards, National Math Standards, National Language Arts Skills Standards, National Educational Technology Standards (NETS), Data Processing Management Association (DPMA), and International Association of Administrative Professionals (IAAP), Gateway Algebra I and Gateway English II

Standard: 7.0

The student will evaluate the purposes, functions, and features used in preparing digital communication.






Learning Expectations

The student will:

- 7.1 Compare and contrast the differences in presentation text, imaging, audio, video, and graphic software. (Gateway English II 1.0, 2.0, 3.0, 4.0; Gateway Algebra I 3.0, 5.0)
- 7.2 Interpret/use terminology, features and concepts of digital communication. (Gateway English II 2.0)
- 7.3 Identify layout and design criteria used in producing a professional looking interactive multimedia presentations. (Gateway English II 3.0; Gateway Algebra I 3.0, 5.0)
- 7.4 Identify various items that can be designed and published using presentation digital communications software. (Gateway English II 3.0)
- 7.5 Compose, organize and edit information using keyboard, scanner, Internet, media player, and a digital camera. (Gateway English II 1.0, 3.0; Gateway Algebra I 5.0)

Student Performance Indicators: Evidence Standard is Met

The student:

-  Creates a storyboard that illustrates the software applications used and the function of each in developing interactive multimedia projects as one of the portfolio activities.
-  Applies interactive multimedia terminology, concepts, and features.
-  Applies layout and design criteria to produce professional looking interactive multimedia presentations.
-  Modifies a pre-designed presentation to demonstrate creativity.
-  Extracts and places text, graphics, audio and/or video clips in a presentation project.

Sample Performance Task

Divide the class into groups. Formulate sentences related to digital communications and key them into a one-page document. Import the list to a presentation management program and use the tools palette to complete the layout and design.

Integration/Linkages

All subject areas, SCANS, National Standards for Business Education, Policy Commission for Business and Economic Education, National Science Education Standards, National Math Standards, National Language Arts Skills Standards,

National Educational Technology Standards (NETS), Data Processing Management Association (DPMA), International Association of Administrative Professionals (IAAP), Gateway Algebra I, and Gateway English II

Standard 8.0

The student will apply concepts and use technology tools and resources to create content, manage information, and communicate ideas relevant to a specific project.








Learning Expectations

The student will:



- 8.0 Determine appropriate preparation for an oral and/or written presentation to a specified audience. (Gateway English II 2.0, 4.0)
- 8.1 Select the appropriate tools to develop an interactive multimedia project. (Gateway English II 3.0)
- 8.2 Develop the interactive multimedia project. (Gateway English II 1.0, 2.0, 3.0, 4.0)

Student Performance Indicators: Evidence Standard is Met

The student:

-  Produces and presents a finished product using various interactive multimedia tools.
-  Utilizes graphic design software to create original digital art.
-  Uses sound editing software to create original music/sound
-  Incorporates animate text or graphics using application software.
-  Designs logic structures to handle user interaction.
-  Prepares script, visuals, and format with animated text and graphic sound clips for presentation.
-  Presents an oral presentation directed to specific audience. with interactive multimedia software.

Sample Performance Tasks

-  Upon completion of unit of study, students select a related topic and gather information to present a multimedia presentation with accompanying oral commentary to fit a specific audience (civic organizations, student organization, parent meeting, etc.) Presentation handouts and outline of commentary will be given to audience. Students will work in teams to practice and edit presentations before final presentation. Students will evaluate presentations using a rubric. Teachers will evaluate planning, revisions, and presentations.
-  Design an electronic interactive portfolio that showcases examples of both creative work (music, art, etc.) as well as examples of work created in other areas of study (English essays, social studies research, etc.).

Integration/Linkages

SCANS, National Standards for Business Education, Policy Commission for Business and Economic Education, National Science Education Standards, National Math Standards, National Language Arts Skills Standards, National Educational Technology Standards (NETS), Data Processing Management Association (DPMA), International Association of Administrative Professionals (IAAP), English I, Gateway English II

Standard 9.0

The student will develop and demonstrate human relations, self-management, organizational and professional leadership skills.







Learning Expectations

The student will:

- 9.1 Examine the value of leadership skills and confidence through personal reflection.
- 9.2 Assess image building and decision making skills. (Gateway English II 1.0)
- 9.3 Illustrate public relations techniques. (Gateway English II 1.0)
- 9.4 Demonstrate effective teamwork.
- 9.5 Apply parliamentary procedure skills. (Gateway English II 4.0)
- 9.6 Examine the goals and principles of organizations such as Business Professionals of America, Computer Science Club, Future Business Leaders of America, etc. (Gateway English II 2.0)

Student Performance Indicators: Evidence Standard is Met

The student:

-  Analyzes leadership and confidence through professional development activities.
-  Applies effective image building technique.
-  Composes and lays out informative articles for publication in local and/or state publications.
-  Organizes and manages a team presentation on leadership.
-  Demonstrates parliamentary procedure.
-  Participates in Business Professionals of America, Computer Science Club, Future Business Leaders of America, etc.

Sample Performance Task

Creates, lays out and presents a presentation about local chapter activities in the school assembly.

Integration/Linkages

All subject areas, SCANS, National Standards for Business Education, Policy Commission for Business and Economic Education, National Science Education Standards, National Math Standards, National Language Arts Skills Standards, National Educational Technology Standards (NETS), Data Processing

Management Association (DPMA), International Association of Administrative Professionals (IAAP), Gateway Algebra I and Gateway English II , Youth organization handbook

Standard 10.0

The student will collaborate with peers, experts, and others to develop a finished interactive project.

Learning Expectations

The student will



- 10.0 Define team roles. (Gateway English II 1.0)
- 10.2 Define team norms. (Gateway English II 1.0)
- 10.3 Identify the components of an interactive multimedia project. (Gateway English II 1.0, 2.0, 3.0)
- 10.4 Select a project topic.
- 10.5 Design a map or storyboard for the topic/project. (Gateway Algebra I 5.0)
- 10.6 Create or acquire the necessary graphics, digital photography or video.
- 10.7 Develop or acquire sound and/or music. (Gateway English II 3.0; Gateway Algebra I 3.0, 5.0)
- 10.8 Create an animation. (Gateway English II 3.0; Gateway Algebra I 3.0, 5.0)
- 10.9 Locate or create content.
- 10.10 Create a user-interface model for interaction.
- 10.11 Develop a project.

- 10.12 Present the finished product to an audience. (Gateway English II 4.0)



- 10.13 Test the finished product and evaluate the team process.

Student Performance Indicators: Evidence Standard Is Met

The student

-  Collaborates with others to produce a finished multimedia project.
-  Packages the final project for dissemination

Sample Performance Task

-  Create a kiosk presentation for a school. The finished product should include all aspects of the school environment (teachers, students, classes, sports, extra-curricular, etc.). Team building should include the creation of areas of specialty (graphics, sound, content, etc.) and a management structure. Specific timelines should be created, posted, and monitored.
-  Create a product that will introduce the planets in our solar system to a sixth grade audience. The finished product should include a review and test

module and the necessary art for marketing the product. Evaluation will be determined by the successful presentation and utilization of the product.

Integration/Linkages

All subject areas, SCANS, National Standards for Business Education, Policy Commission for Business and Economic Education, National Science Education Standards, National Math Standards, National Language Arts Skills Standards, National Educational Technology Standards (NETS), Data Processing Management Association (DPMA), International Association of Administrative Professionals (IAAP), Gateway Algebra I, and Gateway English II

Standard 11.0

Students will evaluate career opportunities and career paths while demonstrating employability skills required within the industry.






Learning Expectations

The student will:

- 11.1 Research the Multimedia Design\Digital Communications industry for various career paths and job titles. (Gateway English II 2.0, 3.0)
- 11.2 Develop an inventory of interest and map interest with the duties your profile of career opportunities in the Multimedia Design\Digital Communications field.
- 11.3 Project future career opportunities within the industry. (Gateway Algebra I 3.0, 4.0)
- 11.4 Research and analyze organizational skills necessary to achieve success in school or in the work place. (Gateway English II 2.0)
- 11.5 Discuss the importance of maintaining a work schedule, meeting deadlines, maintaining a clean and orderly work area, working on multiple tasks simultaneously, maintaining inventory, and storing materials in appropriate locations. (Gateway English II 4.0)

Student Performance Indicators: Evidence Standard is Met

The student:

-  Researches and develops a profile of career opportunities in the Multimedia Design\Digital Communications field.
-  Designs an inventory check sheet of personal interest and employers' expectations in Multimedia Design\Digital Communications field.
-  Profiles personal characteristics, which are beneficial to the success of a professional in industry.
-  Researches and develops a projection of industry trends related to career opportunities in field.
-  Demonstrates skills that tend to lead to promotions, such as continuing education, attendance, attitude, professionalism, compliance with policies and procedures, priority on customer service (*internal and external*),

adaptability to organizational change, and development and use of communication skills.

Sample Performance Task

Develop a presentation to teach time management skills and techniques. Present the presentation to classes in the school, community organization, and professional groups. Develop an interactive multimedia design presentation for the Multimedia Design\Digital Communications career field. Participate in a mock performance review.

Integration/Linkages

All subject areas, SCANS, National Standards for Business Education, Policy Commission for Business and Economic Education, National Science Education Standards, National Math Standards, National Language Arts Skills Standards, National Educational Technology Standards (NETS), Data Processing Management Association (DPMA), International Association of Administrative Professionals (IAAP), Gateway Algebra I, Gateway English II , *Dictionary of Occupational Titles*, *SOURCE*, *Tennessee Edition of the American Careers Program*